

CLAIMS

What is claimed is:

- 1           1. A system comprising:  
2           a handheld computer including a first application program to maintain  
3           a first database, and a second application program to enable a user to access  
4           said first database and change records in said first database according to  
5           features selected by the user; and  
6           a host computer system including a synchronization program to  
7           provide a synchronization of information on said first database and  
8           information on a second database maintained by a server.
- 1           2. The system of claim 1, wherein said synchronization program  
2           maintains a map file of checksum values to determine which records are new  
3           and which records have changed since previous synchronization.
- 1           3. The system of claim 1, wherein said synchronization program is  
2           configured to update dirty flags maintained by said first application program  
3           to reflect changes made during synchronization between said handheld  
4           computer and said server.
- 1           4. The system of claim 1, wherein said handheld computer is a  
2           personal digital assistant.
- 1           5. The system of claim 1, wherein said first application program is a  
2           Personal Information Manager and said first database is an address book  
3           database.
- 1           6. The system of claim 5, wherein said second application program is a  
2           telephone management application program to enable a user to select  
3           telephone service features for those contacts that appear in the address book  
4           database.
- 1           7. The system of claim 6, wherein said telephone service features  
2           selectable by a user includes at least one of call waiting, call forwarding, call  
3           blocking, caller ID block, distinctive ring and anonymous call reject.

1           8. The system of claim 1, wherein said host computer system further  
2 comprises a Personal Information Manager to maintain records in a second  
3 address book database.

1           9. A method comprising:  
2           providing a first application program on a handheld computer to  
3 maintain a first database;  
4           providing a second application program on a handheld computer to  
5 enable a user to access said first database and change records in said first  
6 database according to features selected by the user; and  
7           using a host computer system to synchronize information on said  
8 handheld computer with information maintained by a server.

1           10. The method of claim 9, wherein said using a host computer to  
2 synchronize information further comprises:  
3           reading records of said first database from said handheld computer;  
4           determining which records of said first database have been modified;  
5           reading modified records of a second database maintained by a server;  
6           updating records of said second database to reflect changes made to  
7 said modified records of said first database; and  
8           updating records of said first database to reflect changes made to said  
9 modified records of said second database.

1           11. The method of claim 9, further comprising maintaining a map file  
2 of checksum values, each checksum value corresponds to a respective record  
3 of said first database, said checksum values useful in determining which  
4 records are new and have changed.

1           12. The method of claim 9, further comprising updating dirty flags  
2 maintained by said first application program to reflect changes made during  
3 synchronization between said handheld computer and said server.

1           13. The method of claim 9, wherein said handheld computer is a  
2 personal digital assistant.

1           14. The method of claim 9, wherein said first application program is a  
2 Personal Information Manager and said first database is an address book  
3 database.

1           15. The method of claim 9, wherein said second application program is  
2 a telephone management application program to enable a user to select  
3 telephone service features for those contacts that appear in the address book  
4 database.

1           16. The method of claim 15, wherein said telephone service features  
2 selectable by a user includes at least one of call waiting, call forwarding, call  
3 blocking, caller ID block, distinctive ring and anonymous call reject.

1           17. The method of claim 9, wherein said host computer system further  
2 comprises a Personal Information Manager to maintain records in a second  
3 address book database.

1           18. A machine-readable medium that provides instructions, which  
2 when executed by a processor, cause said processor to perform operations  
3 comprising:  
4           reading records of a first database on a handheld computer;  
5           determining which records of said first database have been changed;  
6           reading records of a second database maintained by a server;  
7           determining which records of said second database have been  
8 changed;  
9           updating records of said second database to reflect changes made to  
10 records of said first database; and  
11           updating records of said first database to reflect changes made to  
12 records of said second database.

1           19. The machine-readable medium of claim 18, wherein operations  
2 further comprise maintaining a first map file of checksum values, each  
3 checksum value of said first map file corresponds to a respective record of  
4 said first database, said checksum values are used in determining which  
5 records have changed.

1           20. The machine-readable medium of claim 19, wherein operations  
2 further comprise maintaining a second map file of checksum values, each  
3 checksum value of said second map file corresponds to a respective record of  
4 said second database, said checksum values are used in determining which  
5 records have changed.

1           21. The machine-readable medium of claim 18, wherein operations  
2 further comprise updating dirty flags maintained by said first application  
3 program to reflect changes made during synchronization between said  
4 handheld computer and said server.

1           22. A handheld computer comprising:  
2 a first application to maintain a first database;  
3 a second application to enable a user to access said first database and  
4 change a record in said first database according to features selected by the  
5 user; and  
6 a wireless communications link with a server, wherein said hand held  
7 computer is configured to communicate information associated with said  
8 features selected by the user to said server over said wireless communications  
9 link.

1           23. The handheld computer of claim 22, wherein said first application  
2 is a Personal Information Manager and said first database is an address book  
3 database.

1           24. The handheld computer of claim 23, wherein said second  
2 application is a telephone management application to enable a user to select  
3 telephone service features for those contacts that appear in said address book  
4 database.

1           25. The handheld computer of claim 24, wherein said telephone  
2 service features selectable by the user includes at least one of call waiting, call  
3 forwarding, call blocking, caller ID block, distinctive ring and anonymous call  
4 reject.

1           26. The handheld computer of claim 22, wherein said handheld  
2 computer is a personal digital assistant.